ABSTRACT OF THE DISCLOSURE

A hydrogen generator comprises therein a reformer, a Shifter, a material flow passage with first evaporator through which a material is supplied to the reformer, a reformed gas flow passage for leading the reformed gas derived from the reformer to the Shifter, a shifted gas flow passage through which a shifted gas derived from the Shifter is taken out, and second steam flow passage formed adjacent to the reformed gas flow passage to be located at upstream side of the Shifter. The second evaporator is provided within the second steam flow passage. Apart of heat of the reformed gas is recovered as latent heat by the second evaporator. Thereby, temperature of the Shifter is controlled.